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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,812	09/08/2003	Wolfgang Danzer	038724.52699US	7094

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EXAMINER	
ELVE, MARIA ALEXANDRA	
ART UNIT	**PAPER NUMBER**
1725	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/28/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/656,812	DANZER, WOLFGANG	
	Examiner	Art Unit	
	M. Alexandra Elve	1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,9,12 and 13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,9,12 and 13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

Claim Rejections - 35 USC § 112

Claim 9 recites the limitation "oxygen and carbon dioxide". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Goto (JP 410296472).

Goto discloses laser welding of an aluminum tank having a gaseous shield of carbon dioxide and oxygen. The carbon dioxide ranges from 10% to 62%.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Berlinger et al. (USPN 4,684,779).

Berlinger et al. discloses laser welding of metallic sheets using pressurized gases, such as argon, helium, carbon dioxide and nitrogen.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Fujimori et al. (USPN 4,258,242).

Fujimori et al. discloses welding of a steel pipe using argon and carbon dioxide for shielding.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Taira et al. (USPN 4,320,277).

Taira et al. discloses welding of a pipe using argon and carbon dioxide for shielding.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hamasaki (USPN 4,507,540).

Hamasaki discloses hybrid laser welding using shield gases such as carbon dioxide, oxygen and nitrogen.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimori et al. and Goto, as stated above and further in view of the following:

Fujimori et al. discloses the use of shield gas containing argon and carbon dioxide for welding.

Goto discloses laser welding of an aluminum tank having a gaseous shield of carbon dioxide and oxygen. The carbon dioxide ranges from 10% to 62%.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the carbon dioxide levels as taught by Goto in the Fujimori et al. system because both are directed to welding using a shielding environment.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taira et al. and Goto as stated above and further in view of the following:

Taira et al. discloses welding of a pipe using argon and carbon dioxide for shielding.

Goto discloses laser welding of an aluminum tank having a gaseous shield of carbon dioxide and oxygen. The carbon dioxide ranges from 10% to 62%.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the carbon dioxide levels as taught by Goto in the Taira et al. system because both are directed to welding using a shielding environment.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berlinger et al. and Goto as stated above and further in view of the following:

Berlinger et al. discloses laser welding of metallic sheets using pressurized gases, such as argon, helium, carbon dioxide and nitrogen.

Goto discloses laser welding of an aluminum tank having a gaseous shield of carbon dioxide and oxygen. The carbon dioxide ranges from 10% to 62%.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the carbon dioxide levels as taught by Goto in the Berlinger et al. system because both are directed to welding using a shielding environment.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hamasaki and Goto as stated above and further in view of the following:

Hamasaki discloses hybrid laser welding using shield gases such as carbon dioxide, oxygen and nitrogen.

Goto discloses laser welding of an aluminum tank having a gaseous shield of carbon dioxide and oxygen. The carbon dioxide ranges from 10% to 62%.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the carbon dioxide levels as taught by Goto in the Hamasaki system because both are directed to welding using a shielding environment.

Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto, as stated above, and further in view of Mori et al. (USPN 6,399,915).

Goto does not teach the wavelength of the laser. Mori et al. discloses a laser welding unit, which has a wavelength of 500 to 1064 nm. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a laser wavelength, as taught by Mori et al. system because this is merely a standard laser parameter.

Response to Arguments

Applicant's arguments with respect to claims has been considered but is moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Alexandra Elve whose telephone number is 571-272-1173. The examiner can normally be reached on 6:30-3:00 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

February 17, 2007.

M. Alexandra Elve
Primary Examiner 1725